December 1986

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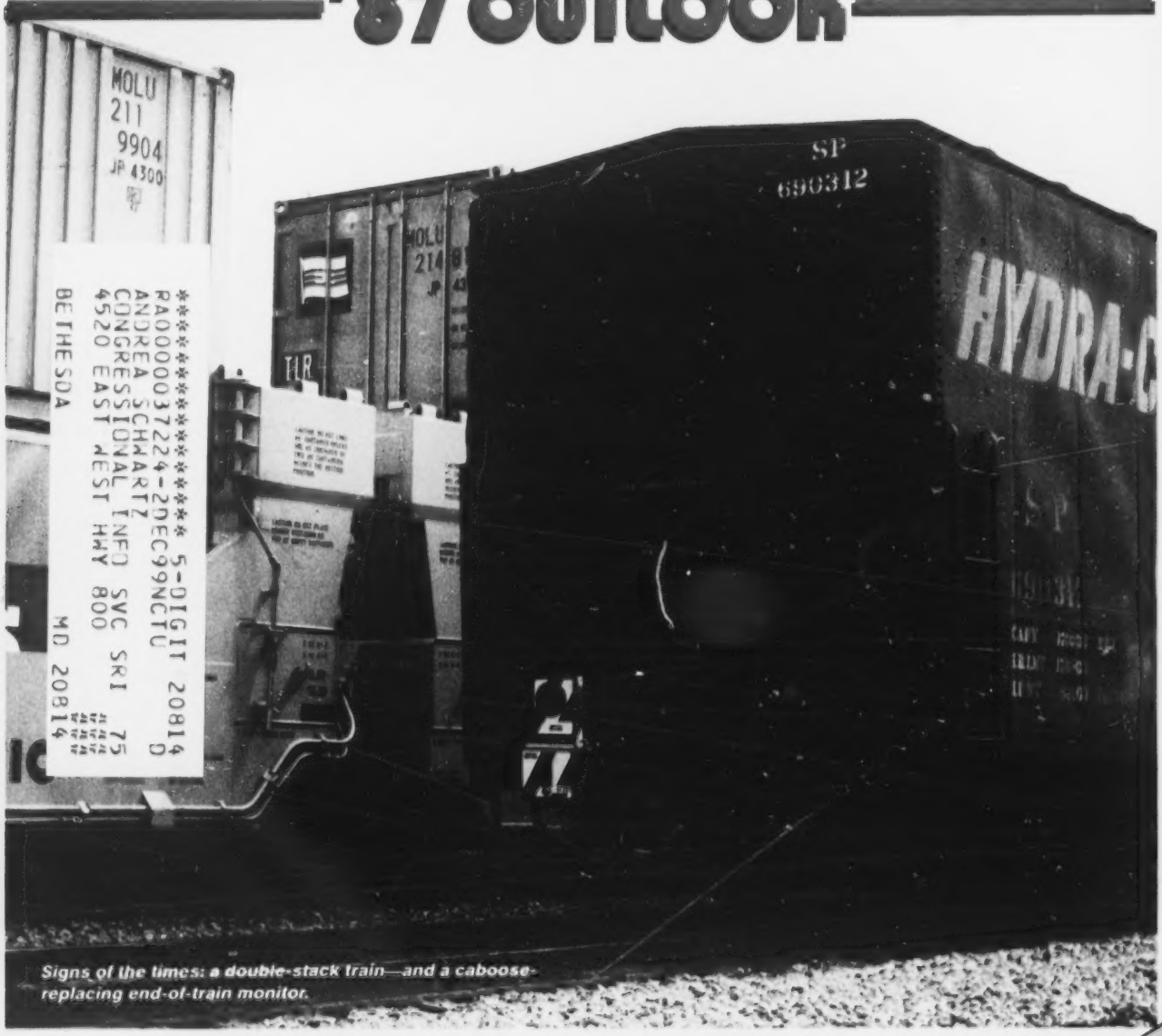
Railway Age

...for the new age of railways

'87 OUTLOOK



Signs of the times: a double-stack train—and a caboose-replacing end-of-train monitor.

Investment: Some capital opportunities

Fighting to stay free

How LIRR and Metro-North will spend $1.8 billion

December 1986

Railway Age

...for the new age of railways

Features

Outlook '87

31 Where will the capital dollars go?

Wrapping up a year-long series on high-productivity railroading, *Railway Age* examines some capital opportunities for high-return investment.

35 Labor issues will heat up

Elimination of the threat of secondary boycotts and finding a FELA replacement will top a busy legislative agenda.

39 Fighting to stay free

Railroads face a new struggle in the 100th Congress to keep their Staggers freedoms. Which side will labor be on?

44 "What do you say when they ask...?"

A man who's been there—AAR economist Frank Wilner—gives some pointers on explaining railroad policy positions.

Review '86

46 Earnings down, hopes high

Despite stable traffic and lower costs, revenues dropped as rates fell. But in some crucial areas, no news was good news.

49 Railroading, Jack Haley style

This regional line entrepreneur listens to his shippers and communicates with his employees. So far, the results look good.

Cover photo by Edward Delvers.

56 A new capital plan for Metro-North, LIRR

New York's two state-owned commuter roads are blueprinting $1.8 billion worth of improvements under a new five-year plan.

64 CalTrain: Where are the riders?

The Peninsula Commute Service has found that it takes more than new equipment to get riders out of their automobiles.

Update

21 SFSP plans major rail restructuring
21 Galveston gets new bulk transfer facility
21 Santa Fe's new "Quality Service" trains target truck traffic
21 CSX will merge two Florida divisions
24 Lithcote installs closed-loop wash system
24 Santa Fe to open auto facility
24 Coal-fueled power: An assist from DOE
24 SP-NdeM begin direct interchange
27 CSX RoadRailers will roll in '87
27 Jacksonville facility will manage and maintain containers
28 Intermodal agreement covers all modes
28 ICC eases rules on contract disclosure
29 "Liberator" links SP with its customers
29 Dow orders first CHEM-KING hoppers
54 NYCTA authorizes pilot AFC projects
54 New Jersey approves Hudson light rail line
54 Busy future seen for Yonkers Works
54 Buffalo opens a new station
54 Railfone tests Chicago market

Comment

6 Inside
19 Watching Washington
20 Lines on Labor
53 In Transit
78 Publisher's Perspective

Departments

8 Meetings
13 Industry Outlook
14 Market Outlook
60 Letters
66 People in the News
67 Track Train Dynamics Newsletter
70 Products
77 100 Years Ago

Published monthly by the Simmons-Boardman Publishing Corporation, 345 Hudson St., New York, N.Y. 10014 USPS 449-130, Vol. 187, No. 12

Subscription rates to all railroad, rail rapid transit employees and industrial traffic department employees in the U.S. possessions, Canada and Mexico: $12 one year, $22 two years; all other countries $35 one year. All other subscriptions in the U.S., Canada and Mexico: $30 one year; all other countries: $50 one year. All subscriptions payable in advance. Single copies $3 plus postage and handling, except special issues. Call toll free (800) 228-9670 Mon-Fri., 9a.m.-5p.m. to place order. In Nebraska call (402) 346-4300. Copyrighted © 1986.

Address all subscriptions, change of address and correspondence concerning them to Subscription Dept., Railway Age, 345 Hudson St., New York, N.Y. 10014.

Printed at Hughes Printing Co., 34 North Crystal St., East Stroudsburg, PA. 18301. Second Class postage paid by Simmons-Boardman Publishing Corp., 345 Hudson St., New York, NY 10014 ISSN 0033-8826. POSTMASTER—SEND change of address forms to Simmons-Boardman, 345 Hudson St., New York, N.Y. 10014.

Market Outlook

Equipment

Southeastern Pennsylvania Transportation Authority: Entered into a $90-million (U.S.) leasing agreement with Bombardier under which SEPTA will acquire 35 new commuter cars and seven new electric locomotives, with Bombardier maintaining the equipment at a 50,000-square-foot maintenance facility to be built in the Philadelphia area. A financial institution, which had not been identified as of late November, will actually own and lease the equipment under an arrangement which Bombardier's mass transit division president, Jean-Yves Leblanc, said was consistent with "the trend toward privatization of mass transit operations in the United States." SEPTA said the equipment will be delivered by late 1987. Supply of the electric locomotives will be subcontracted to the Electro-Motive Division of General Motors.

Washington Metropolitan Area Transit Authority: Will acquire an additional 26 cars from Breda Construzioni Ferroviarie of Italy, thus exercising a fifth and final option under a 1981 contract and bringing the total number of cars ordered from Breda to 366. Westinghouse Electric will supply propulsion and automatic train control equipment. Final assembly of the cars will be performed in Beech Grove, Ind. They are scheduled to go into revenue service in 1988.

Westlake Polymers Corp.: Will lease 100 new, 5,850-cubic-foot-capacity covered hopper cars from Pullman Leasing.

Facilities

Massachusetts Bay Transportation Authority: Awarded a $760,000 contract to Bechtel for the design of five communications subsystems: a security system consisting of intrusion alarms that report directly to MBTA's police department; a train approach announcement system; a transmission network capable of carrying all voice, data, video, and radio traffic; an emergency medical radio link for the subways and a high band radio network for fire department services; and a computer-aided dispatch system for the police department to improve response time.

Revenue freight carloadings

Commodity	Nov. 8 week	Nov. 1 week	Oct. 25 week	Oct. 18 week
Grain	34,342	34,096	35,636	33,813
Other farm products	4,857	5,657	5,635	4,910
Metallic ores	16,672	14,960	15,480	13,526
Coal	119,102	114,929	117,318	113,945
Crushed stone, gravel and sand	14,485	14,991	14,447	14,287
Nonmetallic minerals	8,447	8,382	8,439	8,545
Grain mill products	11,270	11,368	11,455	10,809
Food and kindred products	11,848	12,072	11,667	10,819
Primary forest products	10,635	10,896	10,572	9,927
Lumber and wood products except furniture	7,457	8,167	7,727	7,606
Pulp, paper and allied products	11,779	12,665	12,274	11,708
Chemicals and allied products	23,261	24,202	23,358	22,239
Petroleum products	4,270	4,607	4,876	4,655
Stone, clay and glass products	10,253	10,652	10,517	10,422
Coke	3,865	3,907	4,304	4,011
Metals and products	7,419	7,830	7,227	7,561
Motor vehicles and equipment	21,050	21,338	20,513	19,741
Waste and scrap materials	8,114	8,065	8,011	7,666
Forwarder and shipper assn. traffic	3,346	3,434	3,403	3,287
All other carloads	74,983	75,937	75,024	72,695
LCL traffic	111	111	126	148
Total Cars Loaded	**407,566**	**408,327**	**407,919**	**392,320**
% change from previous year	3.2	(0.0)	3.9	(0.0)
Estimated revenue ton-miles (billions)	18.2	18.3	18.2	17.6
% change from previous year	4.5	1.2	1.7	1.5

Total:	**1986**	**1985**	**% change**
45 weeks	766.6	765.1	0.2

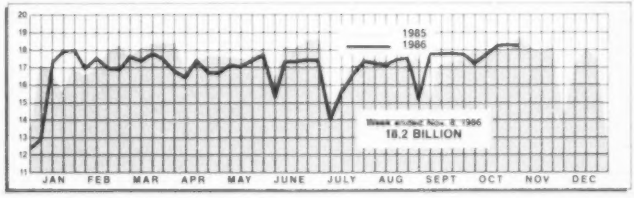
Piggyback loadings

	Nov. 1 week	Oct. 25 week	Oct. 18 week	Oct. 11 week
Trailers/containers	106,571	107,665	105,021	104,929

Cumulative total, 44 weeks		**% change from 1985**
Trailers/containers	4,222,392	8.9

Rail freight traffic trends

Billion ton-miles (Estimated)



Source: Association of American Railroads

Freight cars

	DELIVERED			ORDERED			ON ORDER AND UNDELIVERED		
	October	10months		October	10months		Nov. 1,	Average Backlog	
	1986	1986	1985	1986	1986	1985	1986	1986	1985
Built new by carbuilders	1,132	8,668	9,835	723	10,164	7,835	3,255	3,589	3,727
Built new in RR shops	0	0	406	0	0	0	0	0	28
Built new—total	**1,132**	**8,668**	**10,241**	**723**	**10,164**	**7,835**	**3,255**	**3,589**	**3,755**
Rebuilt	20	95	0	20	95	0	0	13	0
TOTAL	**1,152**	**8,763**	**10,241**	**743**	**10,259**	**7,835**	**3,255**	**3,602**	**3,755**
Locomotives (new and rebuilt)	20	295	517	N/A	N/A	N/A	8	134	236

Source: Transportation Div., AAR and American Railway Car Institute

Labor issues will heat up

Some simmering controversies that could boil over next year involve secondary boycotts; FELA vs workman's comp; branch line job protection; and the trend to "power by the hour."

By GUS WELTY,
Senior Editor

As fast as you get rid of one set of problems, another set of problems arises.

So it is with labor-management relations in the railroad industry, looking back at 1986 and looking ahead to 1987.

National agreements, stretching out to 1988, have been reached—with the United Transportation Union in 1985 and with the Brotherhood of Locomotive Engineers (through arbitration) and the Brotherhood of Railway and Airline Clerks in '86.

Smaller unions have been a problem, one that was yet to be resolved as of this month.

And as one long-term participant in and observer of the rail labor-management venue puts it, "I can't recall when there were more labor-management issues on the legislative scene."

The point is well-taken.

Railroads and their largest unions, UTU and BRAC (now including the Brotherhood of Railway Carmen) have agreements. Railroads and their operating unions, UTU and the Brotherhood of Locomotive Engineers, have agreements.

Railroads and the small unions, most of them, have not reached final agreements, although union negotiators have initialed tentative settlements.

• Local conditions with national impact. Many of the problems that remained, into December, had less to do with the proposed national agreements than with local conditions that had developed—and those problems are surely going to carry over into 1987, with national implications.

Among the issues facing management and the unions:

—The secondary-boycott issue. It had been years since this was an issue, but it became one once again when a single union, striking on a small scale against a small railroad and a terminal company, sought to spread the strike. The Railway Labor Act of 1926 is silent on the issue. The Norris-LaGuardia Act of the New Deal era permits such boycotts. The Taft-Hartley Act of the 1950s prohibits them—but says nothing about the railroad industry, which leaves railroads vulnerable. The U.S. Supreme Court will hear a case brought by the railroad industry; depending upon what the high court says, there may also be legislation introduced, Administration-backed, to bring railroads into line with other industry and to outlaw secondary boycotts and picketing.

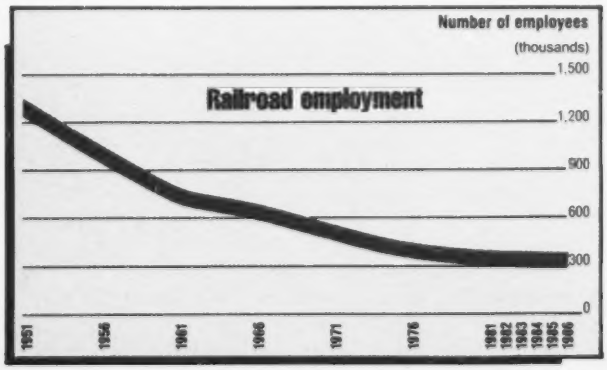
—The labor-protection issue, in cases involving sale of line segments to short line/regional-railroad operators. Now, there is no protection in such cases. What rail labor wants and what its allies in Congress want is protection akin to New York Dock or Oregon Short Line, in which employees are protected for six years against loss. Such job/income protection provisions came within an eye-blink of becoming part of Conrail-sale legislation in the 99th Congress, and House conferees blinked first. But job-protection legislation will be back. House sponsors have promised it.

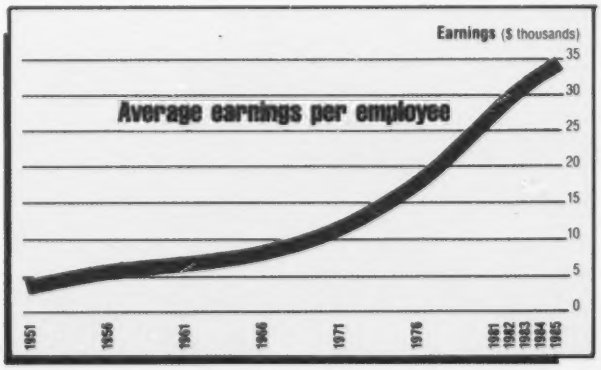
—FELA, the Federal Employer Liability Act. Passed in 1908, it had its purpose at the time. But, the railroads say, that time has long since passed. Under FELA, if a railroad employee is killed or injured (and rail employees are the only workers covered by this specific piece of legislation), the recourse is a lawsuit, and the individual suing has to prove fault. The result is that personal-injury lawyers go hunting for areas where juries are most generous, and while some claimants benefit with huge awards, others (with, maybe, less skillful or less perceptive counsel) come away with little or nothing. Railroads want to put the system into the state-administered workman's-compensation system. This issue has not been a top-priority one with the industry in past years, but it's coming to the fore now.

—Taxes, on Railroad Unemployment Insurance and on Railroad Retirement. Rail management and rail labor reached an agreement on the unemployment program, but it didn't get through Congress, for reasons that are not fully understood, since the parties did agree. Meanwhile, actuaries at the Railroad Retirement Board are recommending substantial increases in RR taxes, just a couple of years after the system was said to have been "saved" by what railroads and unions agreed to.

Of these legislative issues, the two that may be the toughest are those dealing with secondary boycotts and labor protection in spinoffs, although those dealing with financial matters directly won't be easy.

• Secondary boycotts threaten chaos. Developments this year on the secondary-boycott front seem to indicate that

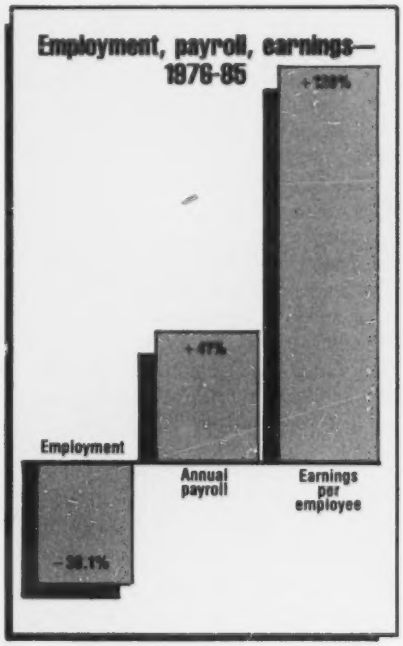




unless the Supreme Court or Congress acts to bring railroads in line with other industry, something bordering on chaos could result.

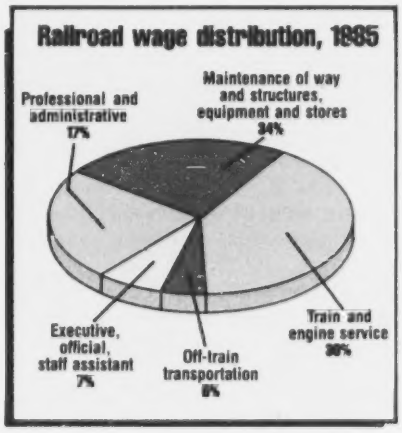
For one thing, small disputes could flare into big ones, as happened in the walkout by the Brotherhood of Maintenance of Way Employes against Maine Central and Portland Terminal.

For another, failure to win a prohibition against secondary action could have crippling effects if the carriers try to follow through with the interest some have expressed in going to individual rather than joint bargaining when national agreements come up for negotiations in 1988. As individual roads have become larger through mergers and consolidations, so the thinking goes, individual priorities may be better served by individual handling. And there is also the matter of the leverage which larger carriers might be able to exert, individually. But, in the absence of a ban on secondary boycotts, a strike against one company could be quickly spread. That would likely trigger Congressional action—and with Democrats in control of both House and Senate, labor might well be willing and even eager to get Congress involved.



Meanwhile, labor will be giving a high priority to the job-protection issue. Here, too, the lines are clearly drawn. Using its discretionary powers, the Interstate Commerce Commission has not imposed protection in line-segment sales by major railroads, and that position has been strongly supported by the Department of Transportation. With the change in control of the Senate that takes effect next month, labor may figure that it stands a much-improved chance of getting a job-protection bill through—but that is by no means a sure bet: Regardless of which political party is in charge, there remains a strong core of opposition to such legislation in the Senate.

Testimony presented at hearings this year stated the obvious, which is that imposition of job (or wage) protection would dry up the regional-railroad movement almost overnight. Studies of two recent line sales have indicated that if protective conditions had been applied, the sale prices would have had to be about three times what they actually were. It follows, of course, that under those conditions the deals would not have been made, shippers would have been deprived of rail service, communities would have lost a valued transportation and tax asset, and employees would have lost jobs. As matters stand, with line segments going for reasonable prices, many and perhaps most affected employees wind up going to work for the new railroad. That would be lost. And it's even questionable as to how many employees would actually be eligible for protection when a line that couldn't be sold was abandoned.


Railroad wage distribution, 1985
Professional and administrative 17%
Maintenance of way and structures, equipment and stores 34%
Executive, official, staff assistant 7%
Off-train transportation 8%
Train and engine service 30%

• **"Power by the hour."** Then, there is another issue that suddenly came front-and-center just within the past few weeks—power by the hour, or the interest expressed by some railroads in obtaining the use of motive power on what amounts to a horsepower-rental basis. Not all carriers now see this as the way to go, but a couple of large ones do and Burlington Northern has taken the lead.

Here, several elements are involved. One is that such arrangements conserve railroad capital. A second is that the locomotive, especially those equipped with microprocessor controls, has become a technologically-advanced piece of machinery, demanding maintenance skills that may or may not exist in railroad shops. A third is that railroad shops have become increasingly expensive facilities to operate.

The shopcraft unions' reaction to this development initially was to hold up on the ratification process on national agreements which their negotiators had initialed, in an apparent attempt to get the new issue on the table. That aspect of the situation wound up in a federal district court, with a decision expected some time this month.

• **The stakes are big.** Railroads and rail labor are heading into a new year with a lot of potential hot spots that need to be cooled-down. And in that context it's worthwhile considering the points made by Richard E. Briggs, executive vice president of the Association of American Railroads at a recent seminar on technology, people and productivity:

—Traditional rail customers in heavy industry are in a mode of slow-growth and no-growth, while the segments of the economy that are growing "produce trailerloads of freight that manifest an unquenching preference for motor carriers."

—What railroads and their employees can change is the efficiency with which they work. Railroads have invested huge amounts of capital in such things as better locomotives, bigger freight cars, improved track and signal systems and advanced computer systems. But "without an efficient work force, capital improvements lose their strategic worth."

—Despite substantial reductions in the work force, rail labor costs today are higher than they were in 1980. High labor costs are pricing railroads out of many markets, and they threaten to negate the productivity improvements made through capital investment.

—Recent contracts with rail unions do recognize that "true job security requires a financially healthy employer," and that "railroad jobs are no more secure than the corporate entity providing the jobs."

Customers buying transportation today, Briggs said, "are as price- and quality-conscious as middle-class homemakers purchasing family necessities. Railroads that fail to offer a competitive transportation package at a competitive price are going to be swept aside. Such are the relentless forces of economic efficiency."

It all comes down to this: "How railroads and their employees accept what they cannot change and address what they can change will define the size and health—maybe even the existence—of freight railroads in the decades ahead." ■

Electrification of Metro-North's Upper Harlem Line has cut travel time and won new riders. Scarsdale station is pictured. Kent Patterson

M-N, LIRR: A new plan

New York City commuters will get a better run for their money (and almost always a seat) when improvements blueprinted under a new, $1.8-billion capital program fall into place.

For the 446,000 riders who board Metro-North and Long Island Rail Road commuter trains on an average weekday, a happier new year is in store.

On Jan. 1, a new five-year plan will begin pumping nearly $1.8 billion worth of improvements into the car and locomotive fleets, the tracks and stations, and the shops and yards of New York's two state-owned commuter roads. Coming on the heels of a five-year program of equal magnitude that technically ends on Dec. 31 (although many Phase I programs will spill over into Phase II), this new infusion of capital could make the busiest and biggest of all American suburban rail operations also the best.

The bundle that the New York Metropolitan Transportation Authority is putting together for Metro-North and LIRR is part of a larger package—totaling $8.3 billion—that MTA hopes to deliver over the next five years to improve rapid transit, commuter rail, and bus operations in a service area that sprawls over nearly 4,000 square miles.

The biggest piece of the package will go to the New York City Transit Authority (*RA*, Nov., p. 52). NYCTA's emphasis will be on repair and rehabilitation of a subway system that has grown creaky and unreliable through years of neglect and abuse, and has suffered a deep loss of riders. The commuter roads, on the other hand, will be investing in equipment and facilities designed to enhance service that is already comparatively good and that must now be geared for bigger passenger loads.

Over the next five years, Metro-North and LIRR together plan to spend $149 million on equipment, $401 million on stations, $454 million on line structures, $156 million on track, $183 million on signals and communications, and $190 million on shops and yards—and these are just the biggest-ticket items on their shopping lists.

• **The Metro-North mix.** The Metro-North five-year program will be heavy on rolling stock acquisitions, with $118 million earmarked for this purpose. An early order of business will be the purchase of 60 new M-4 cars for the New Haven line. Metro-North also plans to acquire coaches and new diesel locomotives for its Upper and West of Hudson services. Both Metro-North and the Long Island will be working on the design for a new generation of electric cars. "Metro-North has budgeted about three times as much for this activity as the LIRR," notes MTA. "Before commitments are made, the two railroads need to collaborate on a common car design."

Among other major Metro-North capital activities will be construction of a north end access at Grand Central Terminal in New York; rehabilitation of the Grand Central Terminal infrastructure, track, power, signals, and interlockings; and the replacement of New Haven line catenary.

Metro-North's share of the new five-year program (Phase II) comes out to $749 million. Its share of the just-ending five-year program (Phase I) was $900 million. How Phase II will build upon the foundations laid in Phase I is described by MTA:

"The purchase of 142 new electric cars, with Phase I funds, has virtually eliminated the problem of standees on the Hudson and Harlem lines. In 1987, 54 new electric cars, bought jointly with Connecticut, will do the same on the New Haven line. New diesel equipment—19 coaches and 10 new self-propelled diesel rail cars—is serving the Upper Harlem and Upper Hudson lines; eight more coaches will arrive next year. The three new diesel coaches operating west of the Hudson will be supplemented by seven more next year.

"These new cars allowed the railroad to use operating funds to accelerate overhauls of its older cars. The Metro-North fleet is now approaching a state of good repair, in which peak performance will be the norm, not the exception. Air conditioning and heating systems now work in Metro-North cars 97% of the time, compared with 82% in 1982. Most of the fleet and the 732-mile track system it runs on are now on a regular replacement basis.

"But a modern fleet that will be 95% electric by 1988 cannot rely on obsolete power substations, which use equipment no longer manufactured and require around-the-clock manning. By 1989, Phase I funds will replace 19 such substations with 38 solid-state, automatic units. Phase I funds have already purchased another 12 units that are feeding power to the newly electrified Upper Harlem line, where ridership has grown by 20% while travel time between Brewster and Grand Central has been cut by 20 minutes.

"Power in Metro-North's enhanced system will move through new third rail, twice as conductive as its predecessor. The new rail is being installed along two-thirds of the 300 miles of electrified track."

Phase I money has also put a centrally controlled, bi-directional signaling network in place. The best-equipped railroad, as MTA points out, cannot remain at peak efficiency without the proper maintenance facilities, and in this area Metro-North has invested heavily. The 200-acre Harmon repair and maintenance shop complex has been modernized. It has been rebuilt to obtain production-line efficiency for complete

overhauls as well as major repairs. And by early 1987, a new shop at Brewster will be maintaining Upper Harlem line cars. It will be equipped with mechanical washers capable of cleaning 100 cars a day.

The new, Phase II program will fine-tune an already smoothly functioning system. Equipment acquisitions in Phase I reduced Metro-North's average number of standees per hour from 4,100 in 1983 to an estimated 580 at the end of 1986. Rolling stock acquisitions contemplated during the new program will provide seats not only for all existing customers but also for thousands of new riders that are in Metro-North's forecasts.

Passenger stations will be upgraded to match the new service standards; Metro-North has budgeted $240.3 million for this purpose, the biggest single item in its new plan.

"Metro-North invested its Phase I capital funds to great and highly visible effect," concludes proud parent MTA. "The railroad's on-time performance, at 80.5% when it was founded, is today 91%. The Phase II program will greatly advance the reconstruction of a commuter rail system that must serve as a bulwark of the region's economy well into the next century."

LONG ISLAND RAIL ROAD
1987-1991 CAPITAL PROGRAM

SUMMARY
($ Millions)

	COMMITMENT YEAR					
CATEGORY	**1987**	**1988**	**1989**	**1990**	**1991**	**TOTAL**
Cars	$10.8	$1.4	$17.6	$0.9	$0.0	$30.7
Passenger Stations	62.2	36.1	39.5	15.2	8.0	161.0
Track	50.6	28.5	24.3	31.6	20.8	155.8
Line Structures	77.5	107.5	18.6	25.1	69.2	297.9
Signals & Comm.	31.1	78.4	1.8	22.7	2.9	136.9
Shops & Yards	49.5	16.2	13.2	23.8	0.0	102.7
Security	0.0	0.0	0.0	0.0	0.0	0.0
Electrification	8.7	17.3	6.0	85.9	0.3	118.2
TOTAL	**$290.4**	**$285.4**	**$121.0**	**$205.2**	**$101.2**	**$1,003.0**

• **Change at Jamaica.** The Long Island, which purchased 174 new electric cars during the Phase I program, is setting aside only $30.7 million for equipment in Phase II. LIRR proposes to acquire three prototype dual-mode, electric/diesel-electric locomotives (for which a search is now under way among suppliers around the world) along with 12 new coaches. These will be used for evaluation of dual-mode service on the Port Jefferson branch.

LIRR's Phase II plan also calls for design of a third main line track between Floral Park and Hicksville and construction of a section of that track between New Hyde Park and Carle Place; and completion of a new Penn Station Central Control center, as well as other track, structure and signal improvements at Penn Station to be under-

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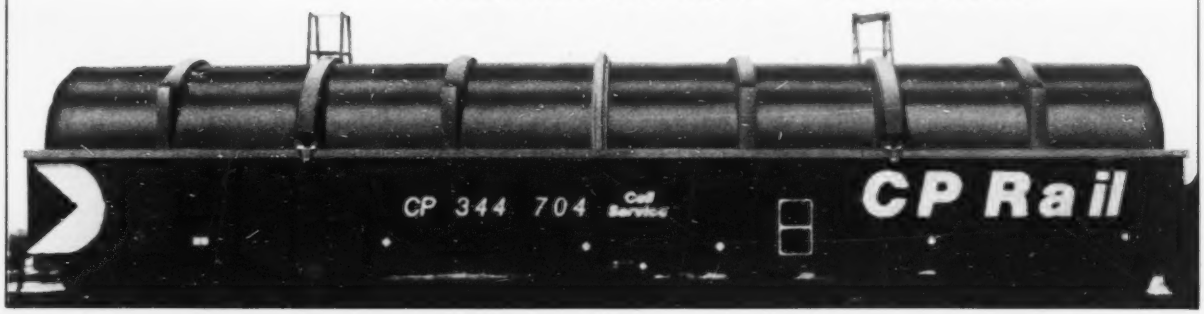

Circle 33 on Reader Service Card

METRO-NORTH COMMUTER RAILROAD
1987-1991 CAPITAL PROGRAM

($ Millions)

	COMMITMENT YEAR					
CATEGORY	1987	1988	1989	1990	1991	TOTAL
Rolling Stock	$29.1	$1.9	$21.2	$42.6	$23.2	$118.0
Passenger Stations	97.0	33.9	52.0	32.5	24.9	240.3
Line Structures	29.4	29.9	44.1	38.0	14.7	156.1
Signals & Comm.	12.2	1.4	29.5	1.4	1.4	45.9
Power	8.5	1.2	33.0	31.2	11.5	85.4
Shops & Yards	13.7	33.6	14.7	15.5	2.5	80.0
Electrification	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.6	2.9	13.3	6.7	0.0	23.5
TOTAL	$190.5	$104.8	$207.8	$167.9	$78.2	$749.0*

*Total may not add due to rounding

taken jointly with Amtrak.

But the biggest single project in LIRR's 1987-91 program, and one calculated to bring cheers from its riders, will take place at Jamaica, that point on the railroad where nine lines converge onto two congested tracks that lead into Penn Station. To unclog this bottleneck, the railroad will entirely reconfigure and rehabilitate the Jamaica complex. The master plan calls for construction of an east-end flyover, a west-end flyover, and an express corridor through the center of the station.

As in the case of Metro-North, the Phase II improvements planned for LIRR will extend and complement improvements that are still going into place under the Phase I five-year plan, for which $1.1 billion was allocated. Under that plan, the new 20-acre West Side storage yard adjacent to Penn Station in lower mid-Manhattan has been built; it will go into operation next summer. "With new capacity to service, clean, and store up to 320 cars west of Penn Station, the railroad will no longer need to send a third of its morning rush-hour trains, empty, back out to Long Island just to get them out of the way," points out MTA. "Cars in need of minor repair will not have to hobble back to Jamaica. And evening-rush passengers will enjoy many more clean cars from Penn Station than ever before."

As MTA sees it, the new West Side yard "will help pull the cork" out of the funnel between Jamaica and Penn Station. Meanwhile, reverse signaling will, in effect, widen the stem of the funnel.

Another Phase I project that won't be completed until 1987 is electrification of the line between Hicksville and Ronkonkoma, which is expected to reduce travel time to Manhattan from this part of Suffolk County by up to 20%.

By the end of the new five-year plan, says MTA, "LIRR will be a system newly made and in part redesigned to provide swift, sure movement between Long Island's booming communities and the vigorous city to their west." ■

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